

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P298988

Luminaire Tested: **GLNA-AF-03-LED-E1-SLL-7030-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P298988  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P191289)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-03-LED-E1-SLL-7030-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND 90° Spill  
Light Eliminator Left OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10142.8 lumens  
Efficiency: N/A  
Efficacy: 105.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G3

Input Watts (W): 96  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

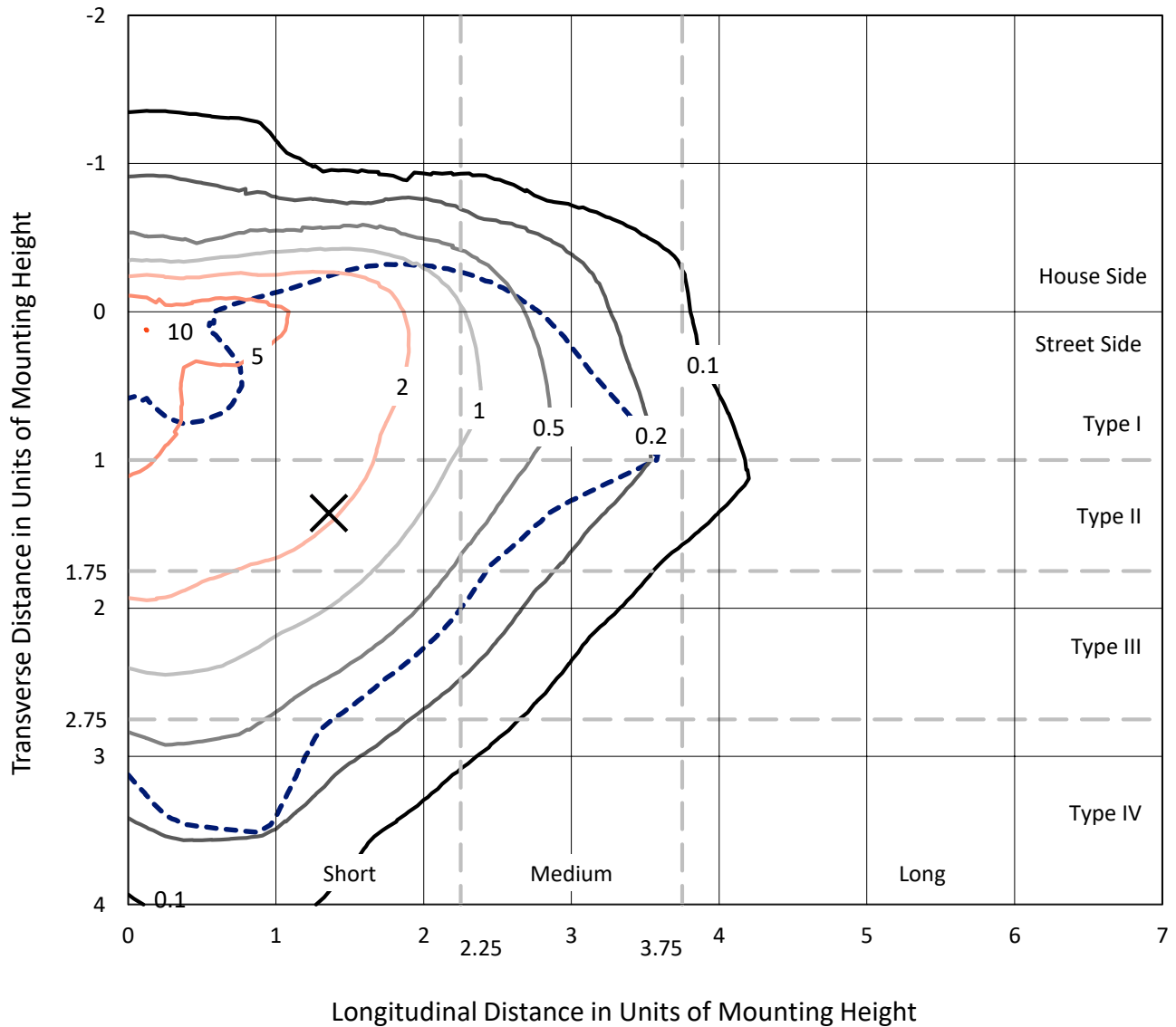


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### Iso-Footcandle Lines of Horizontal Illumination

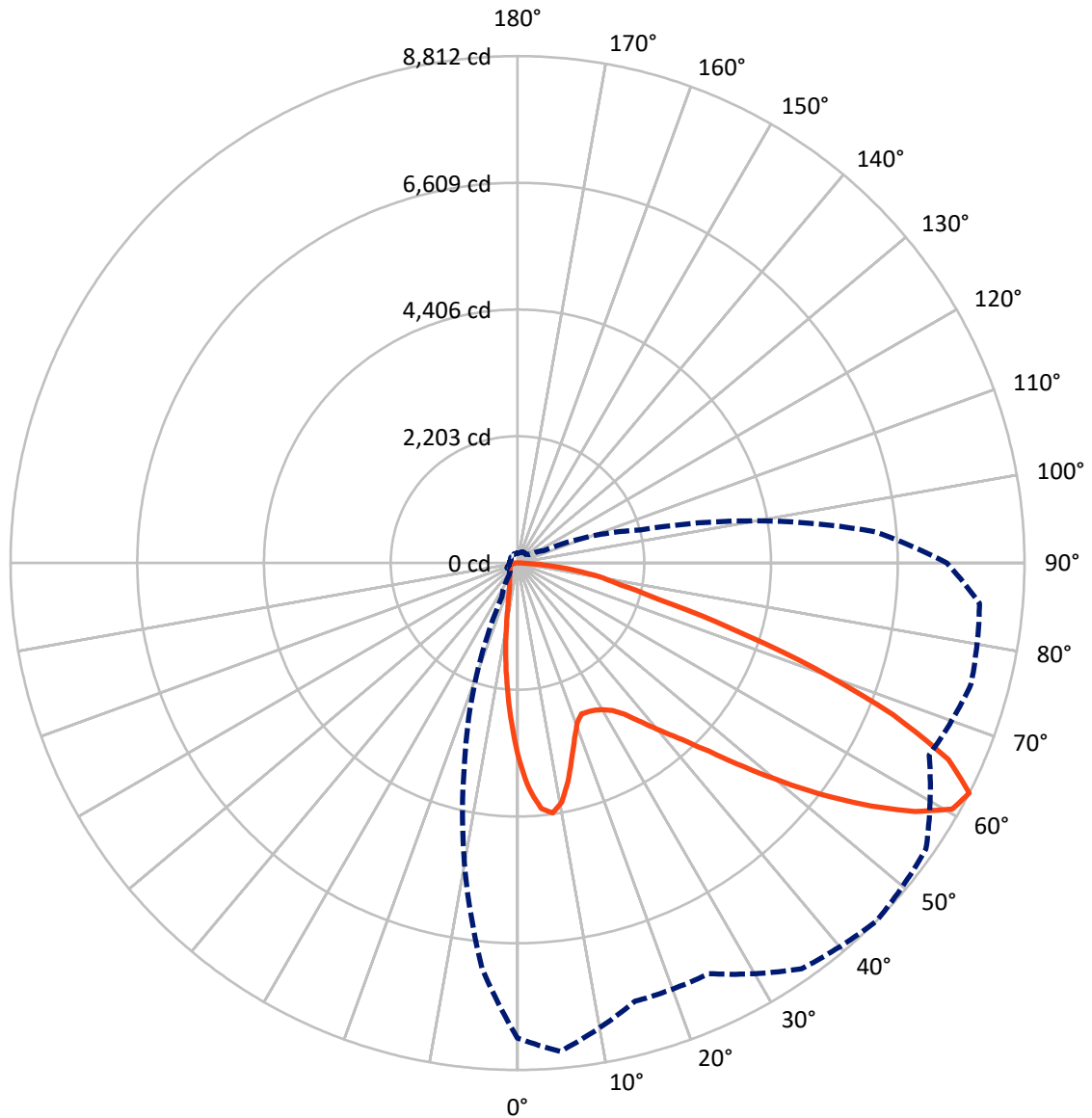
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 10.1 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 62.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1678.5	0.0	1678.5
	% Fixture	16.5	0.0	16.5
<b>Street Side</b>	Lumens	8464.3	0.0	8464.3
	% Fixture	83.5	0.0	83.5
<b>Total</b>	Lumens	10142.8	0.0	10142.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	249.5	2.5
10°-20°	457.4	4.5
20°-30°	666.9	6.6
30°-40°	1027.2	10.1
40°-50°	1511.7	14.9
50°-60°	2217.4	21.9
60°-70°	2478.7	24.4
70°-80°	1213.5	12.0
80°-90°	320.4	3.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	10142.8	100.0
0°-180°	10142.8	100.0

**Coefficient of Utilization**



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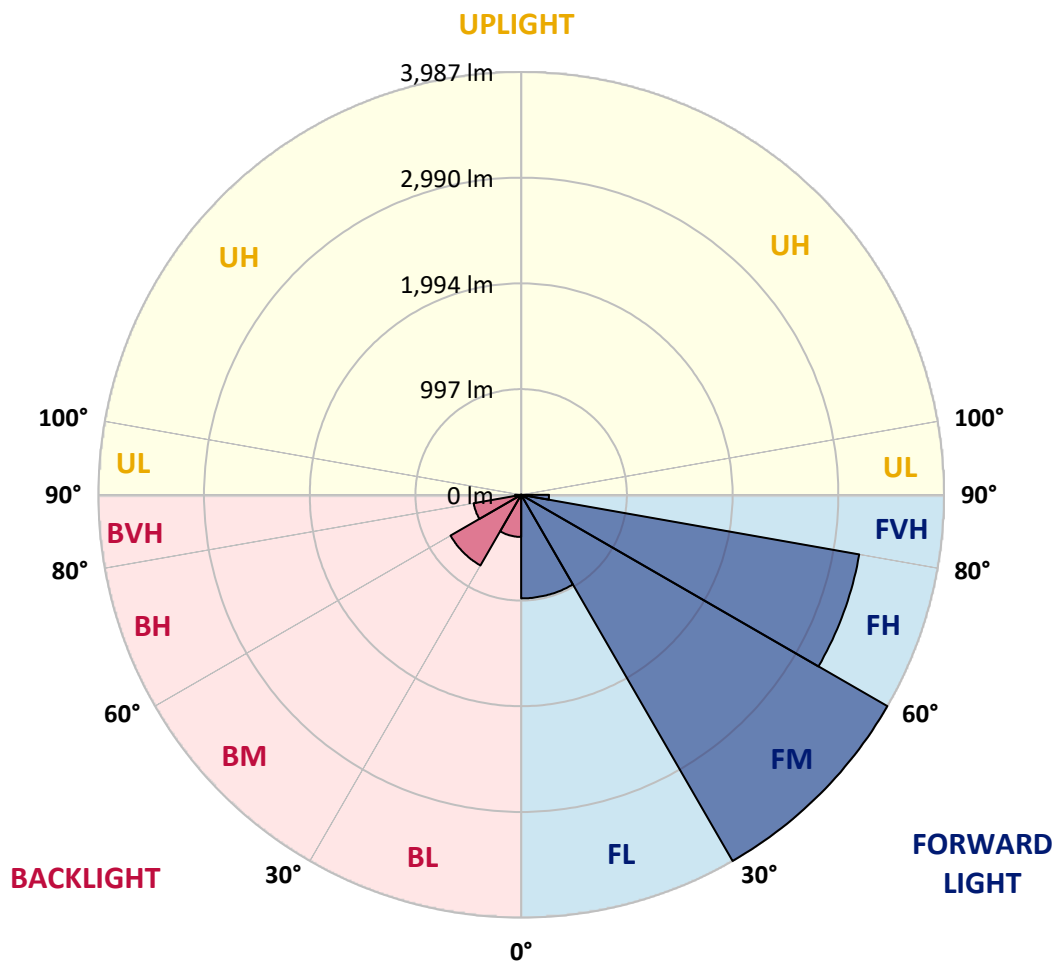
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	976.7	9.6			
FM	(30°-60°)	3987.2	39.3			
FH	(60°-80°)	3237.2	31.9			G2/5000
FVH	(80°-90°)	263.1	2.6			G3/500
BL	(0°-30°)	397.1	3.9	B1/500		
BM	(30°-60°)	769.1	7.6	B1/1000		
BH	(60°-80°)	455.0	4.5	B1/500		G1/500
BVH	(80°-90°)	57.3	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G3**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3426.9	3426.9	3426.9	3426.9	3426.9	3426.9	3426.9	3426.9	3426.9	3426.9	3426.9
2.5°	3560.5	3617.5	3728.5	3811.4	3912.5	3935.9	3968.3	3936.4	3880.1	3805.4	3781.0
5°	3348.2	3469.8	3739.0	3976.1	4186.8	4284.9	4312.4	4231.3	4068.0	3853.4	3722.3
7.5°	3007.5	3180.4	3544.9	3894.1	4204.5	4388.0	4383.5	4195.6	3895.2	3545.5	3335.3
10°	2713.6	2911.1	3329.4	3719.6	4049.0	4226.9	4158.2	3918.2	3559.4	3156.9	2929.0
12.5°	2549.2	2742.7	3167.0	3558.9	3834.3	3895.7	3843.2	3607.9	3270.0	2863.1	2663.4
15°	2520.6	2733.3	3102.4	3421.3	3575.7	3522.3	3459.7	3354.3	3115.6	2768.2	2560.3
17.5°	2644.1	2878.1	3176.6	3325.4	3299.1	3205.9	3188.2	3199.9	3142.6	2873.6	2633.9
20°	2880.5	3161.4	3353.2	3280.3	3089.0	2960.6	2965.2	3144.2	3314.1	3140.7	2866.9
22.5°	3212.1	3532.8	3607.9	3304.2	3000.3	2848.1	2885.0	3175.0	3588.0	3531.2	3181.5
25°	3641.4	3933.7	3879.6	3391.1	3009.2	2862.0	2891.5	3280.8	3911.3	3921.4	3570.8
27.5°	4057.3	4328.5	4107.5	3506.6	3046.1	2894.9	2934.0	3447.4	4220.2	4345.1	4015.7
30°	4381.9	4570.5	4197.8	3611.9	3118.5	2959.0	3007.5	3605.7	4360.9	4631.1	4358.0
32.5°	4650.7	4786.1	4341.7	3742.4	3251.7	3059.8	3145.3	3798.1	4563.2	4903.3	4693.0
35°	4994.0	5032.6	4520.7	3887.9	3457.5	3235.6	3341.5	3986.6	4756.2	5178.1	5023.2
37.5°	5396.8	5347.2	4689.6	4087.0	3723.6	3510.4	3598.0	4193.5	4914.9	5489.8	5360.4
40°	5794.8	5675.3	4901.7	4395.8	4111.6	3834.3	3938.1	4414.3	5063.3	5802.0	5690.0
42.5°	6133.3	5956.4	5110.6	4735.4	4472.7	4191.8	4315.6	4636.7	5204.9	6068.5	5976.0
45°	6383.6	6163.8	5309.7	5061.5	4970.7	4666.8	4725.4	4891.4	5358.2	6291.1	6211.3
47.5°	6607.1	6372.4	5534.9	5390.6	5406.2	5284.5	5190.2	5188.1	5539.0	6472.8	6433.7
50°	6906.5	6661.8	5776.9	5729.4	6059.6	5978.7	5770.7	5534.3	5767.4	6679.2	6674.6
52.5°	7319.2	7120.3	6072.4	6094.7	6669.7	6722.6	6464.8	5950.4	6125.3	7057.6	7031.0
55°	7807.2	7691.0	6475.2	6514.6	7417.8	7455.8	7199.7	6470.5	6651.8	7605.9	7531.7
57.5°	8187.8	8163.4	6916.6	7018.7	7976.6	8147.3	7912.0	7072.8	7245.0	8067.4	7881.2
60°	8339.5	8458.2	7386.7	7527.1	8493.5	8682.3	8476.1	7601.7	7770.8	8258.8	7857.3
62.5°	8257.7	8522.8	7887.3	7875.6	8608.8	8812.3	8667.3	7896.2	8160.7	8061.3	7459.8
65°	7879.0	8290.4	8177.9	7785.8	8214.1	8230.7	8183.8	7764.6	8252.6	7437.4	6691.3
67.5°	7054.2	7646.4	7795.2	7016.5	7149.0	7040.4	6961.7	7044.2	7772.9	6502.3	5623.6
70°	5745.7	6636.8	6707.9	5612.0	5551.7	5478.6	5322.0	5775.2	6826.9	5329.2	4462.2
72.5°	4224.8	5161.5	5380.5	4116.0	3837.2	3852.1	3728.5	4352.2	5550.6	3958.7	3331.5
75°	2890.4	3737.3	4209.7	2872.0	2537.6	2543.6	2527.9	3083.9	4421.0	2753.8	2492.9
77.5°	2111.6	2670.1	3175.0	1930.7	1874.5	1839.9	1831.6	2157.7	3389.4	1999.5	1935.8
80°	1694.4	1972.7	2132.6	1338.1	1439.0	1436.3	1389.9	1483.7	2213.5	1462.5	1447.8
82.5°	1175.4	1516.1	1727.8	1048.7	971.3	955.0	966.4	1105.0	1564.6	999.7	950.6
85°	620.1	1006.9	1711.2	929.4	576.5	459.9	572.1	904.8	1355.5	529.8	463.7
87.5°	79.3	291.1	1132.9	370.9	227.5	122.5	271.7	509.5	870.4	108.1	94.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	3426.9	3426.9	3426.9	3426.9	3426.9	3426.9	3426.9	3426.9	3426.9	3426.9	3426.9
2.5°	3718.0	3643.8	3546.7	3456.8	3363.7	3271.1	3150.2	3074.3	3022.0	3011.9	2989.8
5°	3627.6	3381.1	3194.9	3033.8	2887.7	2681.2	2567.0	2472.1	2421.4	2416.6	2404.2
7.5°	3211.0	2870.9	2619.5	2391.4	2184.5	2017.8	1833.7	1748.1	1712.8	1721.1	1729.5
10°	2777.7	2397.6	2108.7	1875.5	1693.3	1552.8	1405.1	1305.4	1236.1	1222.1	1219.4
12.5°	2461.1	2044.1	1763.7	1599.0	1458.2	1325.8	1169.3	1051.4	961.8	931.1	910.6
15°	2327.1	1871.2	1577.4	1400.1	1244.4	1076.6	931.1	807.8	725.5	698.7	683.6
17.5°	2355.7	1823.2	1449.1	1222.1	1023.2	848.0	664.6	559.1	509.5	496.9	496.9
20°	2505.2	1814.4	1343.0	1058.3	810.0	607.1	456.7	396.4	380.3	378.7	383.0
22.5°	2714.8	1845.7	1264.1	916.2	629.5	443.3	355.7	333.4	326.2	328.0	332.9
25°	3027.1	1951.0	1206.7	789.5	494.0	362.9	317.1	303.9	300.5	305.0	311.1
27.5°	3397.2	2056.4	1170.9	694.1	417.0	331.8	301.5	287.8	290.0	295.6	301.0
30°	3722.3	2142.9	1114.6	626.3	393.1	333.4	301.5	282.7	280.6	281.6	283.3
32.5°	4014.1	2201.3	1048.7	561.5	339.0	296.1	281.6	278.9	266.4	261.9	262.6
35°	4265.5	2201.3	1009.3	523.6	303.9	262.6	239.3	225.3	219.0	219.6	225.9
37.5°	4508.0	2157.2	989.7	502.3	284.9	249.8	229.1	216.8	208.5	206.9	208.0
40°	4722.0	2093.1	967.5	493.4	270.4	242.0	222.6	212.3	203.4	200.7	201.3
42.5°	4893.8	2041.2	942.8	481.8	261.4	236.4	217.9	209.1	199.1	196.2	195.7
45°	5079.5	2024.0	910.6	458.3	265.9	236.9	216.8	207.4	197.3	194.0	192.9
47.5°	5324.2	2078.1	877.1	430.4	275.5	239.8	218.5	207.4	196.7	194.0	192.9
50°	5632.4	2205.1	834.6	389.7	265.9	247.6	217.9	205.6	196.7	194.0	191.9
52.5°	6028.5	2376.9	779.0	343.0	260.3	266.4	216.8	202.4	194.0	190.2	186.3
55°	6509.6	2517.4	712.4	304.4	247.6	261.4	215.2	198.6	189.7	184.1	180.6
57.5°	6862.0	2568.1	627.4	279.5	229.7	253.0	212.9	193.5	184.1	179.6	175.2
60°	6792.3	2470.0	555.3	263.7	219.0	228.6	211.2	189.0	179.0	175.8	171.6
62.5°	6234.3	2213.5	509.0	256.5	212.3	208.5	212.9	184.6	174.7	171.0	170.0
65°	5397.3	1834.8	490.7	254.9	206.9	196.7	198.0	179.6	169.4	166.7	165.6
67.5°	4452.1	1481.0	474.6	260.3	199.6	188.4	183.0	172.9	164.3	161.6	159.5
70°	3510.9	1231.7	467.2	257.0	190.8	180.1	174.1	165.6	158.4	155.5	153.9
72.5°	2827.3	1040.4	463.2	253.6	179.0	168.9	163.3	156.0	148.2	147.2	145.5
75°	2392.7	817.9	424.4	243.1	165.6	155.5	151.7	145.0	137.2	137.2	136.1
77.5°	1845.7	591.5	353.0	215.2	151.7	140.5	137.2	132.1	123.3	124.9	124.3
80°	1363.3	385.9	276.0	178.5	134.5	123.8	122.0	117.1	107.5	109.9	109.9
82.5°	934.0	253.0	198.6	146.1	114.8	104.8	104.8	99.7	89.2	90.3	93.8
85°	469.0	174.1	148.2	113.1	89.2	84.2	84.2	80.4	69.7	70.2	74.8
87.5°	142.8	104.8	98.1	80.9	64.1	63.0	60.1	57.4	50.7	50.1	53.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





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**CANDELA DISTRIBUTION (continued):**

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	3426.9	3426.9	3426.9	3426.9	3426.9	3426.9	3426.9	3426.9	3426.9	3426.9	3426.9
2.5°	2955.6	2923.7	2885.5	2800.6	2772.2	2770.4	2796.3	2769.3	2820.7	2799.0	2822.9
5°	2383.4	2352.5	2309.4	2201.3	2135.5	2090.8	2069.8	2007.3	2052.4	2019.4	2047.0
7.5°	1753.0	1760.2	1731.8	1668.3	1524.9	1453.1	1410.7	1372.7	1405.7	1402.2	1454.7
10°	1232.3	1251.6	1231.7	1167.6	1051.4	1012.0	1019.8	1034.8	1077.9	1099.9	1180.9
12.5°	887.1	886.0	873.2	815.8	739.4	743.7	775.6	801.7	841.3	864.8	947.2
15°	662.3	652.3	646.7	599.8	556.4	566.0	581.6	584.3	609.4	623.4	690.3
17.5°	500.7	505.7	511.7	478.4	445.4	439.3	427.2	412.0	419.4	422.1	455.4
20°	397.5	417.6	432.8	409.2	375.9	357.8	342.3	332.3	332.3	331.8	341.2
22.5°	347.3	361.8	378.1	361.8	331.8	316.0	307.2	299.4	298.3	298.3	307.2
25°	320.2	330.7	346.3	335.2	312.8	301.0	292.7	282.7	278.9	277.7	283.8
27.5°	306.6	311.1	318.9	308.8	290.0	284.4	282.2	273.3	268.1	265.3	271.7
30°	283.8	282.7	283.3	273.3	258.1	257.6	261.4	263.2	261.4	260.8	270.4
32.5°	262.6	260.3	259.7	250.9	236.9	233.7	236.9	240.4	244.2	249.8	260.8
35°	235.8	241.5	244.7	236.9	220.1	210.1	206.3	200.2	196.7	196.7	209.6
37.5°	214.7	227.5	232.6	225.3	206.9	192.9	186.3	185.2	185.7	187.9	200.2
40°	207.4	216.8	221.2	214.1	195.7	183.0	179.0	177.9	179.0	182.5	194.6
42.5°	202.9	209.6	209.1	200.2	185.2	176.3	174.1	172.9	174.1	177.4	190.8
45°	199.1	203.4	199.1	188.4	174.7	170.0	170.5	170.0	171.0	174.7	187.3
47.5°	195.7	197.3	191.9	181.2	166.7	165.6	167.8	169.4	170.5	173.6	186.8
50°	190.8	190.8	185.7	174.7	160.0	160.5	163.3	167.2	167.8	171.0	181.9
52.5°	184.6	184.1	180.6	170.0	154.4	156.0	156.0	160.5	161.6	165.6	176.8
55°	179.6	178.5	176.8	166.7	149.5	152.2	150.6	152.2	154.9	158.9	171.0
57.5°	175.2	172.9	172.9	163.8	145.5	146.6	142.8	145.0	148.2	151.7	164.3
60°	170.5	168.3	169.4	160.0	139.4	138.3	136.7	141.0	142.3	146.1	158.9
62.5°	165.6	163.8	164.3	155.5	135.0	132.1	132.1	136.1	136.7	142.3	154.4
65°	161.6	159.5	158.9	151.1	130.0	126.7	128.3	130.0	131.0	136.7	148.2
67.5°	157.8	153.3	153.3	147.2	124.3	120.9	124.3	123.8	125.6	130.5	139.9
70°	152.8	146.6	147.2	144.4	118.7	114.8	117.7	117.1	118.2	121.5	131.0
72.5°	145.0	139.9	141.0	139.9	113.1	107.5	108.6	108.6	108.6	111.5	121.5
75°	135.0	131.0	134.5	137.2	106.4	98.6	99.7	99.7	98.1	99.7	112.0
77.5°	122.5	120.4	131.6	127.8	98.6	89.2	89.2	88.1	84.9	87.1	100.3
80°	109.3	107.5	121.5	107.0	89.8	77.6	76.4	73.5	70.2	71.9	85.4
82.5°	95.4	93.8	102.1	82.0	77.6	64.1	61.4	56.3	53.0	54.7	66.8
85°	78.2	78.2	78.7	61.9	59.0	49.1	45.8	39.1	35.1	36.2	48.0
87.5°	55.7	57.4	53.0	42.4	35.1	27.3	25.2	21.2	17.7	20.6	25.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CATALOG NUMBER: GLNA-AF-03-LED-E1-SLL-7030-600

**CANDELA DISTRIBUTION (continued):**

	295°	305°	315°	325°	335°	345°	355°	360°
0°	3426.9	3426.9	3426.9	3426.9	3426.9	3426.9	3426.9	3426.9
2.5°	2945.6	3007.0	3076.7	3165.7	3242.3	3367.5	3488.1	3560.5
5°	2202.4	2304.5	2431.4	2595.0	2747.2	2975.7	3202.6	3348.2
7.5°	1576.2	1685.5	1822.7	2026.7	2242.1	2533.5	2833.6	3007.5
10°	1304.3	1416.3	1531.6	1669.4	1845.7	2162.8	2517.4	2713.6
12.5°	1079.0	1198.8	1323.1	1468.1	1631.4	1914.6	2323.3	2549.2
15°	825.7	959.5	1106.1	1289.6	1494.2	1821.6	2275.4	2520.6
17.5°	566.0	715.5	895.4	1121.9	1372.2	1791.4	2361.4	2644.1
20°	389.7	498.5	690.9	956.2	1257.4	1787.6	2526.2	2880.5
22.5°	326.2	374.7	515.1	804.0	1170.9	1835.5	2782.4	3212.1
25°	301.5	330.7	411.4	671.9	1107.9	1946.0	3134.8	3641.4
27.5°	287.3	313.3	373.6	585.5	1058.3	2074.1	3477.6	4057.3
30°	292.7	319.5	362.9	541.4	990.8	2181.1	3782.0	4381.9
32.5°	263.7	275.5	311.1	502.3	942.3	2270.9	4048.5	4650.7
35°	224.8	245.3	277.7	484.0	943.4	2331.1	4339.0	4994.0
37.5°	214.1	234.8	258.1	477.3	956.2	2395.4	4672.4	5396.8
40°	207.4	226.4	246.5	473.5	968.5	2453.8	4999.3	5794.8
42.5°	202.9	220.1	245.3	459.9	974.7	2506.3	5267.9	6133.3
45°	202.4	220.1	249.8	446.5	984.1	2562.6	5493.2	6383.6
47.5°	202.9	227.5	241.5	430.4	984.1	2656.7	5757.5	6607.1
50°	200.7	239.8	232.6	407.6	961.3	2835.2	6119.9	6906.5
52.5°	199.6	238.2	215.2	372.5	921.7	3118.5	6584.3	7319.2
55°	196.7	229.7	202.9	320.2	875.5	3427.5	7081.7	7807.2
57.5°	194.0	203.4	196.2	274.4	804.0	3644.8	7424.0	8187.8
60°	217.4	177.9	190.8	252.0	708.6	3704.4	7410.8	8339.5
62.5°	201.3	166.7	183.5	247.1	641.8	3537.1	7068.3	8257.7
65°	157.8	159.5	176.3	261.4	623.9	3094.0	6461.6	7879.0
67.5°	144.4	152.2	168.9	280.0	625.7	2477.2	5555.1	7054.2
70°	136.1	144.4	160.5	289.4	630.1	1846.8	4391.8	5745.7
72.5°	126.7	133.9	151.1	291.1	600.9	1341.4	3385.1	4224.8
75°	115.3	122.0	137.7	253.6	497.9	930.5	2589.4	2890.4
77.5°	102.6	107.5	120.9	195.7	369.8	595.5	1943.6	2111.6
80°	87.6	90.3	101.5	143.4	253.0	372.5	1537.8	1694.4
82.5°	70.2	71.3	78.7	107.5	164.3	239.3	1029.9	1175.4
85°	49.6	49.6	54.1	78.2	112.0	151.7	559.1	620.1
87.5°	23.3	23.9	23.9	42.9	58.5	77.1	128.9	79.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)